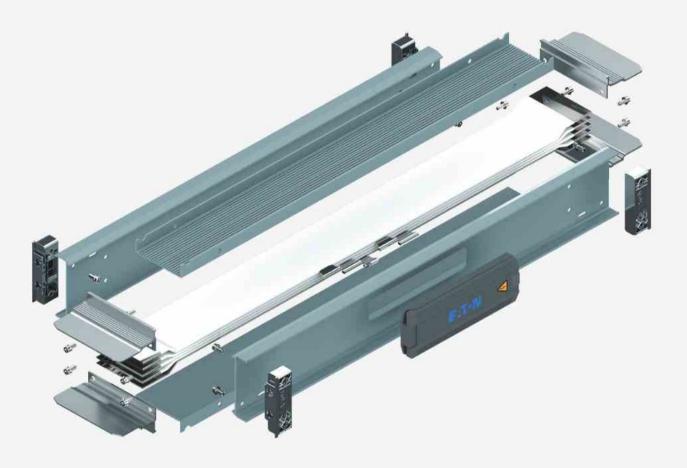
## XAP-B Series Compact Busway

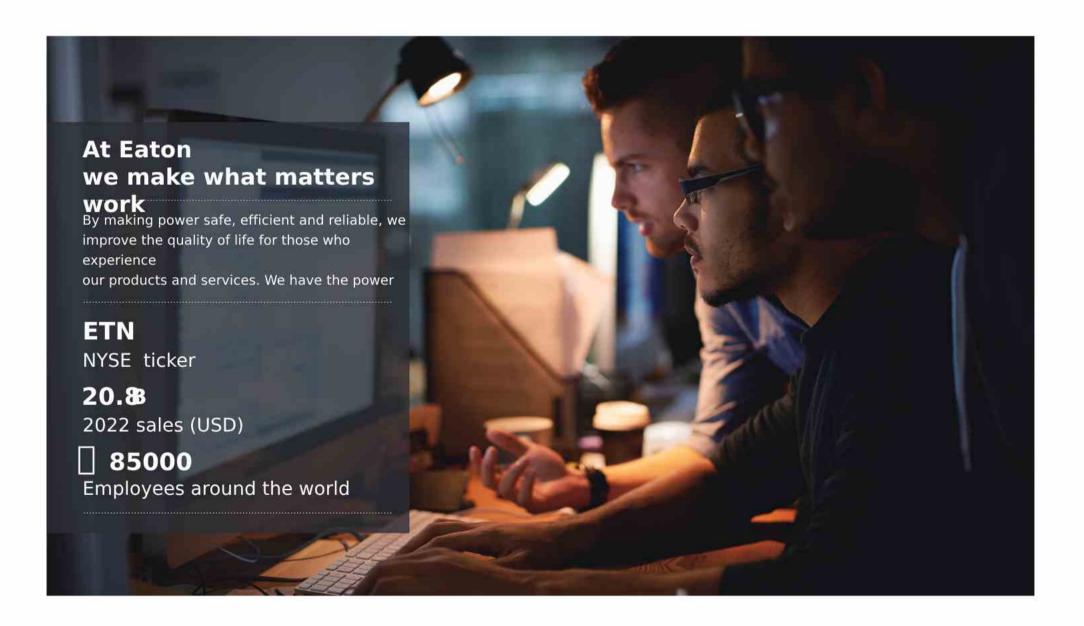
Rated Current 400-5000A





# We're dedicated to improving people's lives and the environment with power management technologies that are

We are a power management company doing business in more than 175 countries. Our energy-efficient products and services help our customers effectively manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably. By giving people tools to use power more efficiently. Helping companies do business more sustainably. And by encouraging each and every employee at Eaton to think differently about our business, our communities—and the positive impact we can have on the world.



## **CATALOGUE**

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Flanged end	/ 25
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### **SINCE 1911**

Eaton was founded by Joseph Eaton in 1911 and started to produce Power distribution buway in 1935.

## Based on local manufacturing Eaton Busway (Jiangsu) Co.,Ltd

According to Eaton's innovative spirit, one hundred years of technology accumulation and the development ability of the Asia Pacific market, Eaton busway factory has continuously introduced new products, It has realized the independent R & D and manufacturing of busway in the Asia Pacific region, providing customers with high-quality products and satisfactory solutions.





### Top manufacturing solutions

Eaton busway manufacturing plant covers an area of 23,000 square

meters and has the industry's top manufacturing solutions to



### Advanced insulation technology

Fully automatic Poyester film (Mylar Class B 13)0or Mica (1200C) insulation wrapping.



#### Full automatic busway assembly line

integrating assembly, inspection and packing together, effectively



### Intelligent warehousing improves delivery efficiency

Intelligent warehouse can accept more busway, and the storage



### Dispatching center makes service faster

Online dispatching of national technical service staff

view the progress of various services in real time



### Refinement of production management

Standardized production management Plant performs MES system,which can display production,quality,safety

## **OUR ADVANTAGE**

EATON owns state of art manufacturing system in the industry, it brings high, precision and top features to the products.



German Trumpf laser cutting and Trupunch ensures ±0.1mm accurancy for sheet-metal parts.



Canadian Accurpress, German Behringer, Italian Euromac and Ame-pressta sheet-metal system enable parts to achieve International high quality level.



Application of Panasonic automatic welding, laser welding and automatic riveting technology highly improves production efficiency. EATON owns independent laboratory for research and development ,which always brings customers high quality product and electricity safety.



Temperature rise system allows max 6300A, which ensures product performance to reach design expectation.



Application of dust simulation tank and water spray platform give product superior IP protection degree performance at the research stage.



Perform strict quality control on IQC,IPQC and OQC to secure product "Zero defection" upon ex-factory.

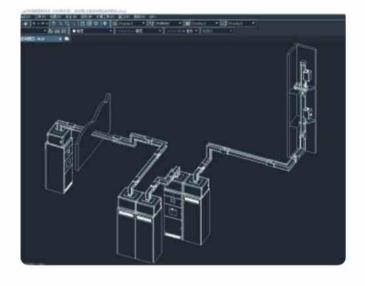
## **OUR ADVANTAGE**

EATON always sticks to innovation research and development, pushes busway technology to safe, energy saving and intelligent direction.

"intelligent manuafcturing".

Manufacturing center sets up MES system and Intelligent factory data platfo

closely butts with ERP, achieves the jump over from product manufacturing

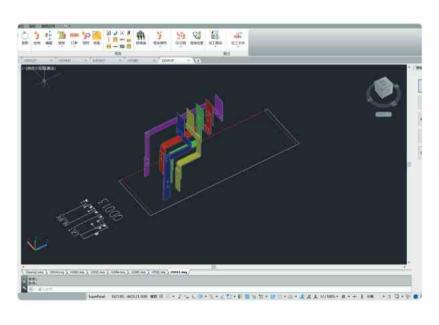


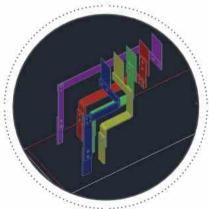
Advanced 3D engineering software, integrated with product features, quickly optimise the busway layout, offers first-best arrangement to the project.



MES system precisely records all the process data and makes all the manufacturing data trackable.

Intelligent superpanel technology brings power to distribution system and provides customer with reliable power supply solution.





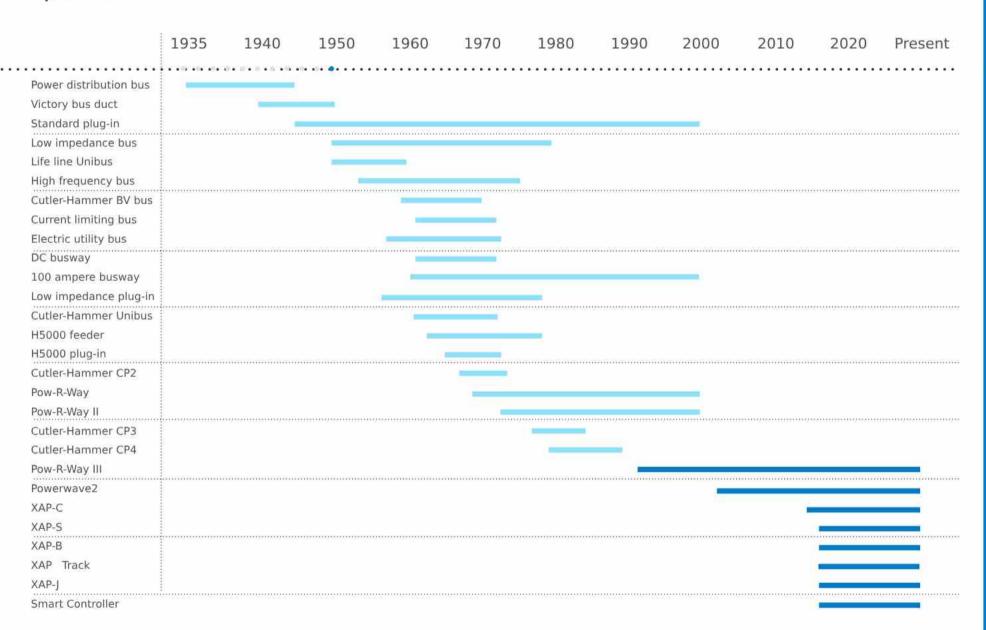
Intelligent factory data platform fully monitors the factory operation efficiency by statistic and analys of all the data related with manufacturing, quality and safety.



## KEEBVATION SINCE 1935

In 1935, comes out first type of busway

### "power





1935







Eaton busway history can be traced back to 1935 last century.

1st busway was called "power distribution bus", which consists of aluminum or copper bars inside a metal housing used for power distribution. it is available from 100-5000A.













## KAPHBa5eries **Busway**

Rated current rating 400-5000A





To seek the perfect combination of technical performance and exquisite design, Eaton XAP series busway system will be your wisest choice. Eaton's continuous innovation in the busway product line not only ensures the economy and reliability of its solutions, but also integrates excellent technology that can be installed horizontally or vertically.



Superior insulation performance

More in line with the transmission requirements of power



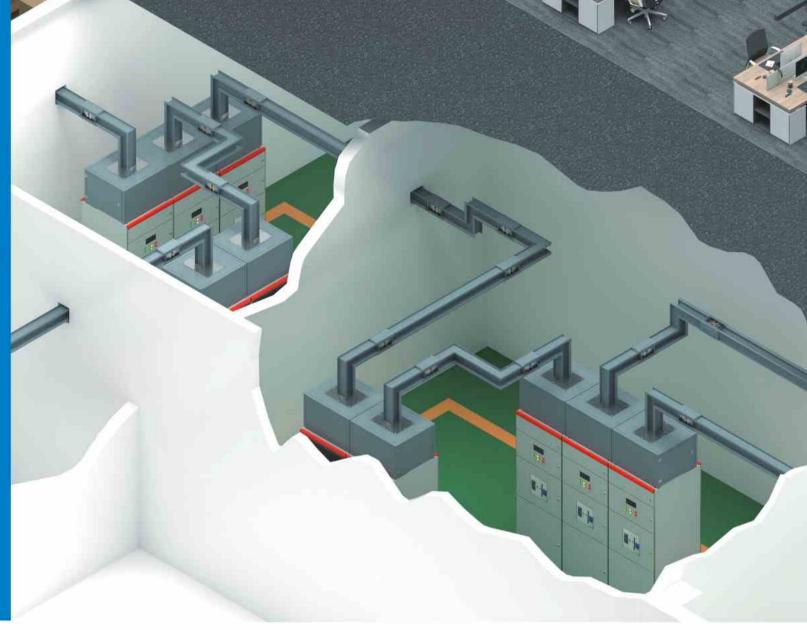
Higher degree of protection



Powerful current carrying capacity Suitable for high power and load power



Flexible connection Greatly improve continuous





Conductors are wrapped by polyester with class B 130 degree insulation and mica (option).

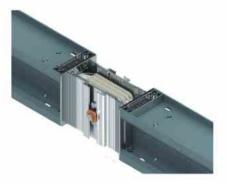
Busway has passed fire resistance test under IEC60331-1:2018 standard on the basis of test voltage AC1000V, 950°C, 180 min and mechanical shock interval 5 min (option).



T shaped heat dissipation fin, more wide and closer, total heat dissipation performance is 20% superior comparing enhances the product IP protection with traditional design.



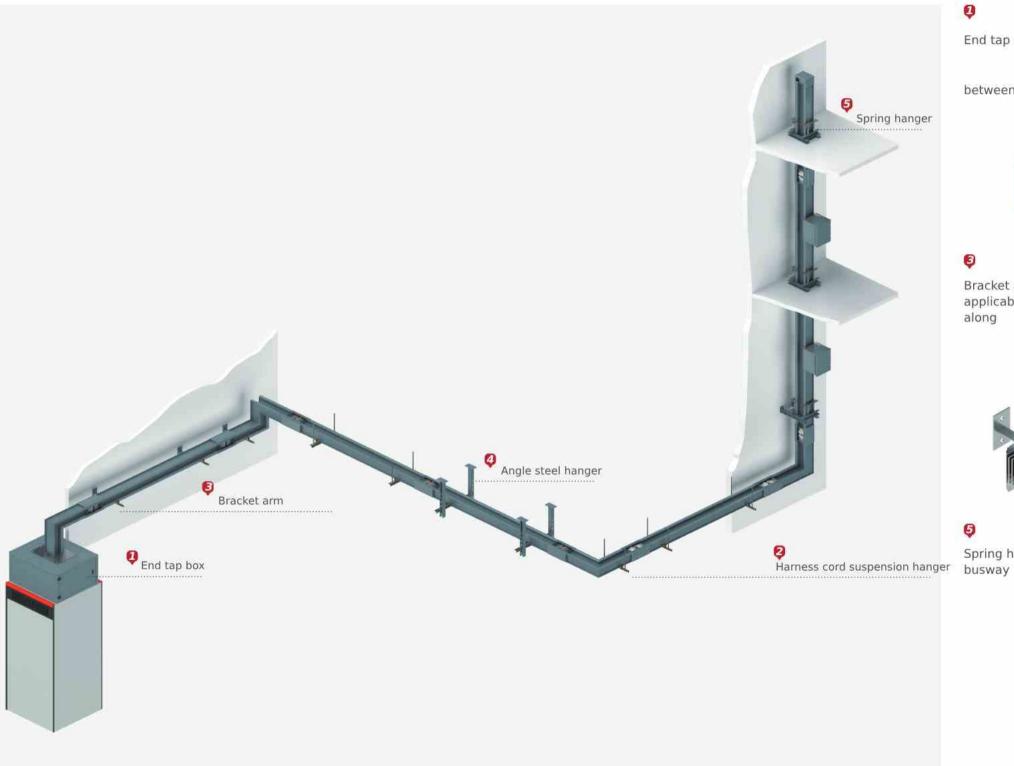
Exclusive IHD (Integral heat dissipation With exquisite workmanship, Eaton design) technology, in combination with busway all contact sides has abandoned traditional "point to line " contact, and improves to "side to side", which greatly degree.



By right of Eaton "Pow-R-Bridge joint package" technology, we innovatively made orientation design to prevent "false and over connection", which fully guarantees reliable contact and stable electricity power transmission.

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## MASWBayeries compact Installation accessories





End tap box, to protect connection

#### between





Bracket arm Bracket arm is applicable for the busway installation along



Spring hanger, for the application of





Harness cord suspension hanger, applicable



Angle steel hanger, applicable for 3200A-5000A busway horizontal



Middle fixation hanger, when the floor

meters high, or equipped with plug in



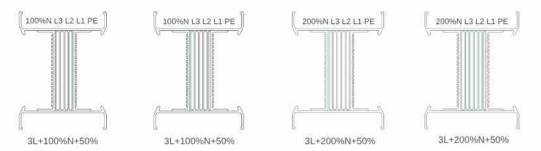
14 | Powering Business Worldwide Powering Business Worldwide | 15

## Technique data

ltem	Unit	Data											
Rated current	А	400	500	630	800	1000	1250	1600	2000	2500	3200	4000	5000
Standard	IEC 6 syste		2012:1	V swite	chgear	and co	ntrol ge	ear ass	emblie	s – Part	6:Busl	oar trur	nking
Third party certificate	CQC,	KEMA-	KEUR										
System	Appli	cable fo	or 3P3V	V, 3P4V	V and 3	P5W sy	/stem						
Frequency	Hz	50/60	)										
Rated operation voltage (Ue)	٧	≤	690 V (	with ta	upniduff≤	1000	V(with	out tap	nitf				
Rated insulation voltage (Ui)	٧	≤100	0V										
Rated impulse withstand voltage Uir	n <b>þ</b> V	8 (wit	th tap o	ff unit	)/12 (w	rithout	tap off	unit)					
Rated short time withstand current (	lcw) k	4 20	20	30	30	50	50	65	80	80	100	120	120
Rated peak short circuit current (Ipk	) kA	40	40	63	63	105	105	143	176	176	220	264	264
IP	IP54/I	P66											
Pollution degree	Ш												
Ambient temperature	°C-5 ~	- 40 de	gree, a	verage	tempe	rature	does n	ot exce	ed 35	degree	wi@4h		
Above sea level	m	≤200	00										
Fire propagation features	Ye s												
Housing material	Alumi	num-a	lloy										
Housing finishing	Electr	ic stati	ic powd	ler spra	ay/ Alun	ninum (	oxidatio	on					
Conductor material	Alumi	num											
Conductor finishing	Tin / s	ilver p	lating										
†nsulation	Mylar	Class	B 13707 N	Mica 12	200°Cop	tion)							
			Cor	nducto	r resista	ince							
Resistance (R20)	mΩ/m	0.113	0.103	0.087	0.071	0.051	0.040	.030 0	.025 0.	020 0.0	)15	0.011	0.008
Resistance (R35)	mΩ/m	0.147	0.134	0.013	0.092	0.067	0.053 (	0.039	.032 0	.026 0.	019	0.015	0.01
Reactance (X)	mΩ/m	0.018	0.017	0.014	0.012	0.008	0.007	0.005	0.008	.007 0	.005 0.	004 0.0	04
Impedance (Z)	mΩ/m	0.120	0.11	1 0.09	5 0.077	0.056	0.044	0.032 0	.028 0	.022 0.	017	0.013	0.010
				Voltag	je drop								
Power factor 0.6	V/m	0.057	0.065	0.069	0.072 0	.065 0	.064 0.	061 0.0	)74	0.076	0.072	0.069	0.074
Power factor 0.7	V/m	0.064	0.073	0.078	0.080.0	.073 0	.072 0.	068 0.0	0.0 080	83 0.07	78 0.07	4	0.078
Power factor 0.8	V/m	0.070	0.080	0.085	0.088 0	.080 0	.079 0.	074	0.085	0.088	0.083 (	0.079 0	.081
Power factor 0.9	V/m	0.076	0.087	0.092	0.095	0.087 0	.085 0	.080 0.	089 0.0	92 0.0	87 0.08	32 0.08	2
Power factor 1.0	V/m	0.078	0.089	0.095	0.098 0	.089 0	.088 0.	083 0.0	0.0 280	88 0.08	33 0.07	8 0.07	3

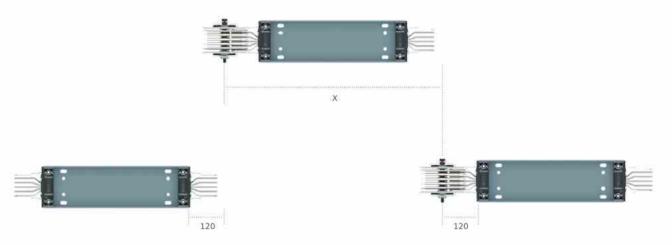
## XAP-B series compact busway

XAP-B busway is widely used in the 3P3W, 3P4W and 3P5W system.

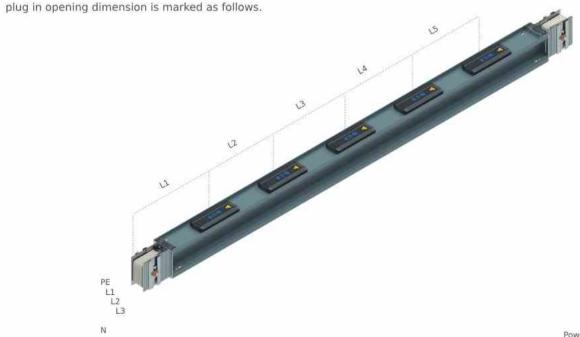


#### XAP-B busway length definition

Busway and functional unit length is calculated from the joint centerline, for the feeder, minimum length is 400mm, standard length is 3000mm.



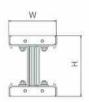
Plug in type busway, minimum length is 800mm, standard length is 3000mm, busway can be equipped with five plug in openings on each



### XAP-B series compact busway Physical data

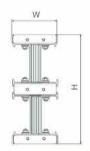
Single deck busway





	Current	Current Dimension		Wei	ight
No.	rating(A)	Width W∏ mm∐	Height H[] mm[]	4W ∏kg/m∏	5W ∐kg/m[
1	400	142	113	8.4	8.8
2	500	142	118	8.9	9.3
3	630	142	128	9.7	10.2
4	800	142	143	10.9	11.5
5	1000	142	173	13.3	14.2
6	1250	142	203	15.7	16.8
7	1600	142	253	19.8	21.3

### Double decks busway

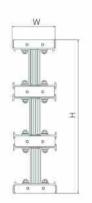


	Current	Dime	Dimension		ght
No.	rating(A)	Width W (mm)	Height H	4W (kg/m)	5W (kg/m)
1	2000	142	337	25.7	27.5
2	2500	142	387	29.7	32.0
3	3200	142	487	38.1	41.1
4	4000	142	607	48.3	52.0



### Tripartite decks busway





	-	Dime	Weight		
No.	Current	Width W[ mm[	Height H[] mm[]	4W ∐kg/m∏	5W ∐kg/m∐
1	5000	142	826	63.3	68.8

Makef@ihe data is only used as reference to calculate the support hangers, not for site acceptance.

### Joint

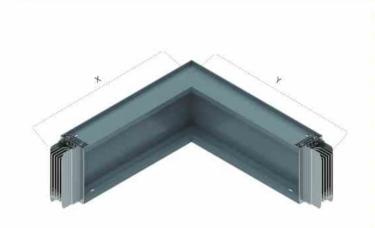


Note: Joint double-headed bolt torque value is 68±7 Nm

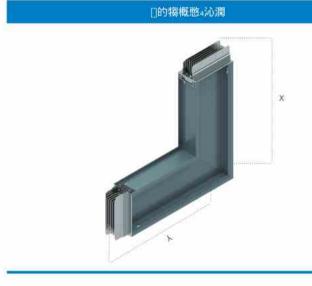
No.	Current rating(A)	Joint bolt qty
1	400	1
2	500	1
3	630	1
4	800	1
5	1000	1
6	1250	1
7	1600	1
8	2000	2
9	2500	2
10	3200	4
11	4000	4
12	5000	6

## MASWBaseries compact Fittings standard dimension

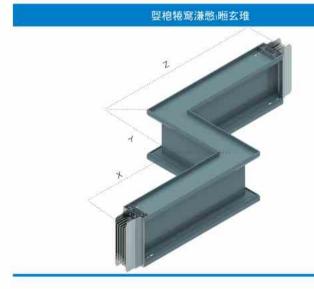
L horizontal elbow



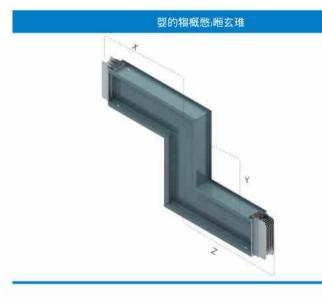
No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=400
2	500	X=400 Y=400
3	630	X=400 Y=400
4	800	X=400 Y=400
5	1000	X=400 Y=400
6	1250	X=400 Y=400
7	1600	X=400 Y=400
8	2000	X=400 Y=400
9	2500	X=400 Y=400
10	3200	X=400 Y=400
11	4000	X=400 Y=400
12	5000	X=400 Y=400



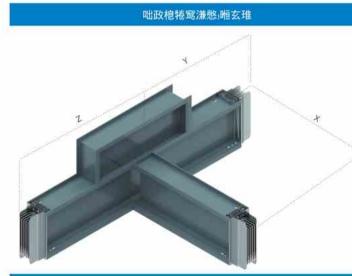
No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=400
2	500	X=400 Y=400
3	630	X=400 Y=400
4	800	X=400 Y=400
5	1000	X=400 Y=400
6	1250	X=400 Y=400
7	1600	X=500 Y=500
8	2000	X=500 Y=500
9	2500	X=500 Y=500
10	3200	X=500 Y=500
11	4000	X=500 Y=500
12	5000	X=600 Y=600



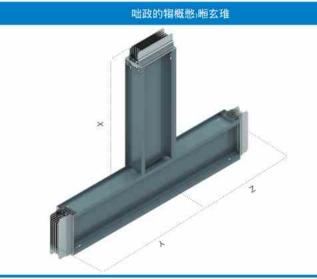
No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=200~700 Z=40
2	500	X=400 Y=200~700 Z=40
3	630	X=400 Y=200~700 Z=40
4	800	X=400 Y=200~700 Z=40
5	1000	X=400 Y=200~700 Z=40
6	1250	X=400 Y=200~700 Z=40
7	1600	X=400 Y=200~700 Z=40
8	2000	X=400 Y=200~700 Z=40
9	2500	X=400 Y=200~700 Z=40
10	3200	X=400 Y=200~700 Z=40
11	4000	X=400 Y=200~700 Z=40
12	5000	X=400 Y=200~700 Z=40



No.	Current rating(A)	D	imension(mm)	
1	400	X=400	Y=250~1000	Z=400
2	500	X=400	Y=250~1000	Z=400
3	630	X=400	Y=250~1000	Z=400
4	800	X=400	Y=250~1000	Z=400
5	1000	X=400	Y=250~1000	Z=400
6	1250	X=400	Y=250~1000	Z=400
7	1600	X=500	Y=250~1000	Z=500
8	2000	X=500	Y=250~1000	Z=500
9	2500	X=500	Y=250~1000	Z=500
10	3200	X=500	Y=250~1000	Z=700
11	4000	X=500	Y=250~1000	Z=700
12	5000	X=600	Y=250~1000	Z=600



ĺ	No.	Current rating(A)	Dimension(mm)
	1	400	X=500 Y=400 Z=400
	2	500	X=500 Y=400 Z=400
	3	630	X=500 Y=400 Z=400
	4	800	X=500 Y=400 Z=400
	5	1000	X=500 Y=400 Z=400
	6	1250	X=500 Y=400 Z=400
	7	1600	X=500 Y=500 Z=500
	8	2000	X=500 Y=500 Z=500
	9	2500	X=500 Y=500 Z=500
	10	3200	X=500 Y=700 Z=500
	11	4000	X=500 Y=700 Z=500
	12	5000	X=500 Y=700 Z=700



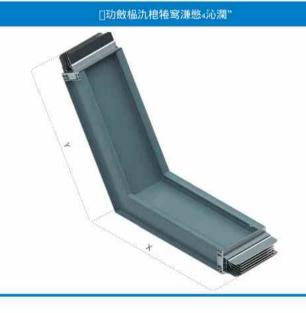
No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=400 Z=400
2	500	X=400 Y=400 Z=400
3	630	X=400 Y=400 Z=400
4	800	X=400 Y=400 Z=400
5	1000	X=400 Y=400 Z=400
6	1250	X=400 Y=400 Z=400
7	1600	X=500 Y=500 Z=500
8	2000	X=500 Y=500 Z=500
9	2500	X=500 Y=500 Z=500
10	3200	X=500 Y=500 Z=500
11	4000	X=500 Y=500 Z=500
12	5000	X=600 Y=600 Z=600

	水桶    地 根 洪 帝 払 具
	*
*	

	No.	Current rating(A)	Dimension(mm)	
	1	400	X=400 Y=400~1000	Z=50
	2	500	X=400 Y=400~1000	Z=500
-	3	630	X=400 Y=400~1000	Z=500
	4	800	X=400 Y=400~1000	Z=500
	5	1000	X=400 Y=400~1000	Z=500
-	6	1250	X=400 Y=400~1000	Z=50
-	7	1600	X=400 Y=400~1000	Z=500
	8	2000	X=400 Y=400~1000	Z=500
	9	2500	X=400 Y=400~1000	Z=500
-	10	3200	X=400 Y=400~1000	Z=50
1	11	4000	X=400 Y=400~1000	Z=50
+	12	5000	X=400 Y=400~1000	Z=600

□功斂榀氿的犓概憋₄沁濶

No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=400
2	500	X=400 Y=400
3	630	X=400 Y=400
4	800	X=400 Y=400
5	1000	X=400 Y=400
6	1250	X=400 Y=400
7	1600	X=400 Y=400
8	2000	X=400 Y=400
9	2500	X=500 Y=500
10	3200	X=500 Y=500
11	4000	X=500 Y=500
12	5000	X=600 Y=600



No.	Current rating(A)	Dimension(mm)
1	400	X=400 Y=400
2	500	X=400 Y=400
3	630	X=400 Y=400
4	800	X=400 Y=400
5	1000	X=400 Y=400
6	1250	X=400 Y=400
7	1600	X=400 Y=400
8	2000	X=400 Y=400
9	2500	X=400 Y=400
10	3200	X=400 Y=400
11	4000	X=400 Y=400
12	5000	X=400 Y=400

	Current rating	Rated current after reduction(A)							)				
Reducer	before reduction	400	500	630	800	1000	1250	1600	2000	2500	3200	000 !	000
	500	R05		(F)	-		-	1.5		150	170	150	
	630	R04	R05	(#)	**		(#)	180	180	1871	187	128	<b>25</b> 0
	800	R04	R05	R06	1981	-	-	==0	**	(*)	:#J	(40)	
	1000	R04	R05	R06	R08		1.5	-	2	120	120	121	:41
	1250		R05	R06	R08	R10	•	Ŧ	*	20	120	æ,	3
	1600	::::	28	R06	R08	R10	R12	(2)	(F)	(5)	133	13,0	(3.0
	2000	-	.=.	, ®.	R08	R10	R12	R16	<del>18</del> 01	<del>(*)</del>	88	<b>34</b> (	<b></b>
	2500	(2)	*		120	R10	R12	R16	R20	190	121	120	12.5
	3200	(-)		-	-		R12	R16	R20	R25	121	57	27
	4000	85	·	್	170	170		R16	R20	R25	R32	:5%	17.5
	5000	(#)			(*)	-	-	180	R20	R25	R32	R40	e7.

Note: Reducer is also available to be equipped with fuse or MCCB, contact the factory for details.

Expansion joint	Current rating(A)	Height] P[] mm
	400	213
	500	218
	630	228
	800	243
120 350	1000	268
	1250	303
	1600	348
0 P	2000	427
	2500	487
	3200	577
	4000	667
_	5000	926

Note: Expansion joint has adjustment distance of  $\pm 40$  mm, when the linear distance is 50 m, need to include one set of expansion joint.

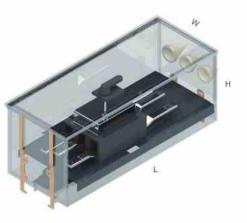


#### Plug in box

Plug in box distributes electricity power from the busway to the load, and provides over load protection for the branch unit.

#### Product features

- ·Plug in box enclosure is made of cold-rolled steel with compact structure and high strength.
- ·Door panel comes with piano hinge with easy operation.
- ·Plug in box is equipped with fixiation hook,to prevent accidental pull out with load.
- ·Plug in box bottom is assembled with guide plate to guarantee correct phase during the installation.
- ·Both T type plug jaw and busway opening stab has silver plating on the surface, which reduces the contact resistance.



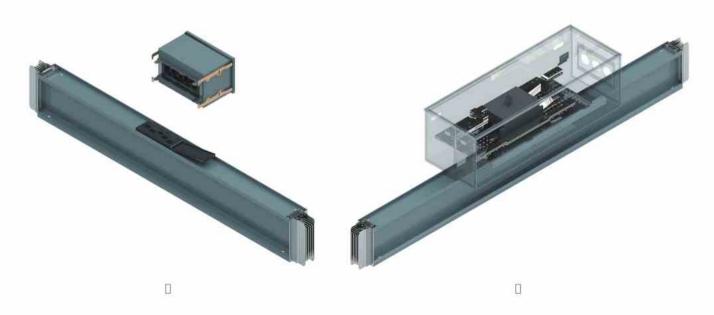
#### Product spec

·Plug in box includes five standard specification, they can be equipped with fuse, MCCB or any other protection component; ·MCCB can be 3 or 4 pole, with option of shunt trip, fire alarm, leakage protection and electrical operation, etc.

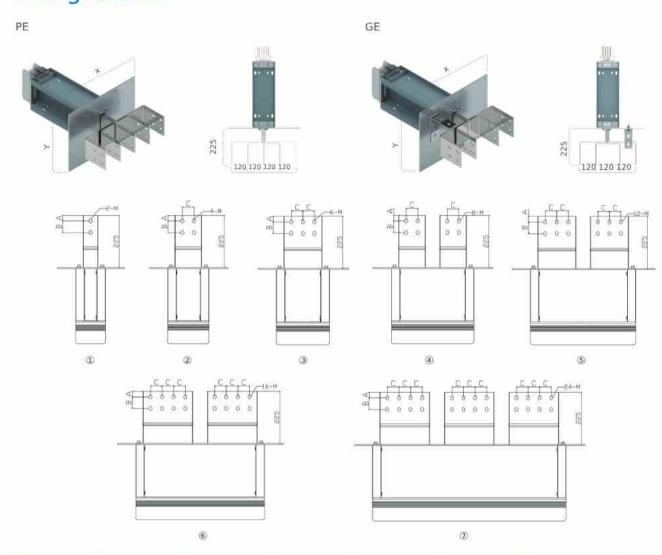
### Plug in box outline standard dimension

Current rating(A)	L (mm)	W(mm)	H(mm) w/o rotary handle	H(mm) with rotary handle	Box No.	Figure
100	360	230	230	270	1	П
160	400	250	250	290	2	П
250	500	270	270	310	3	
400	650	310	310	350	4	П
630~1000	1200	420	420	460	5	

Note: Above dimension indicates standard value, for special design, pls contact our engineer.



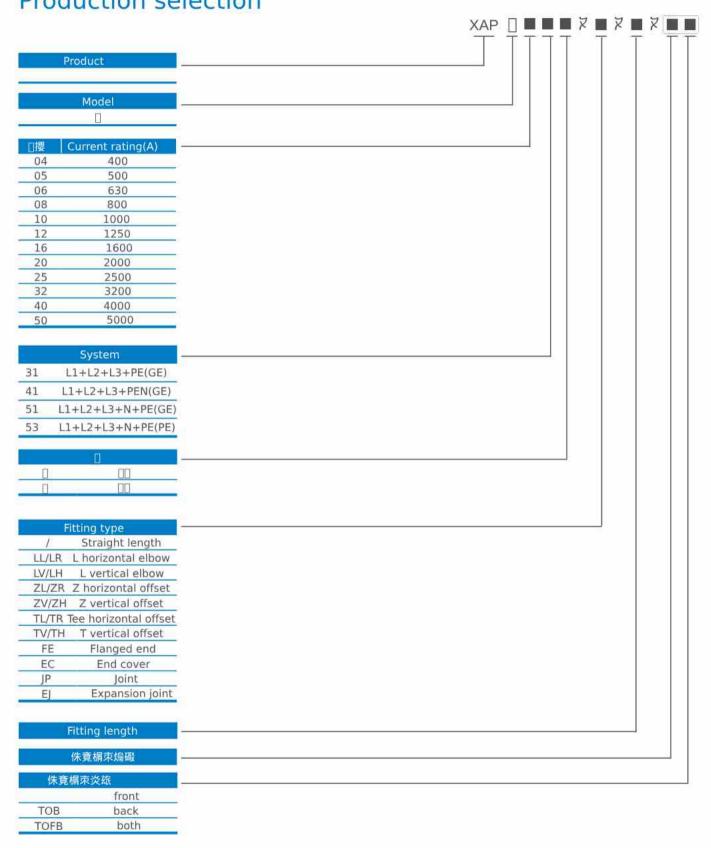
### MASWBaseries compact Flanged end

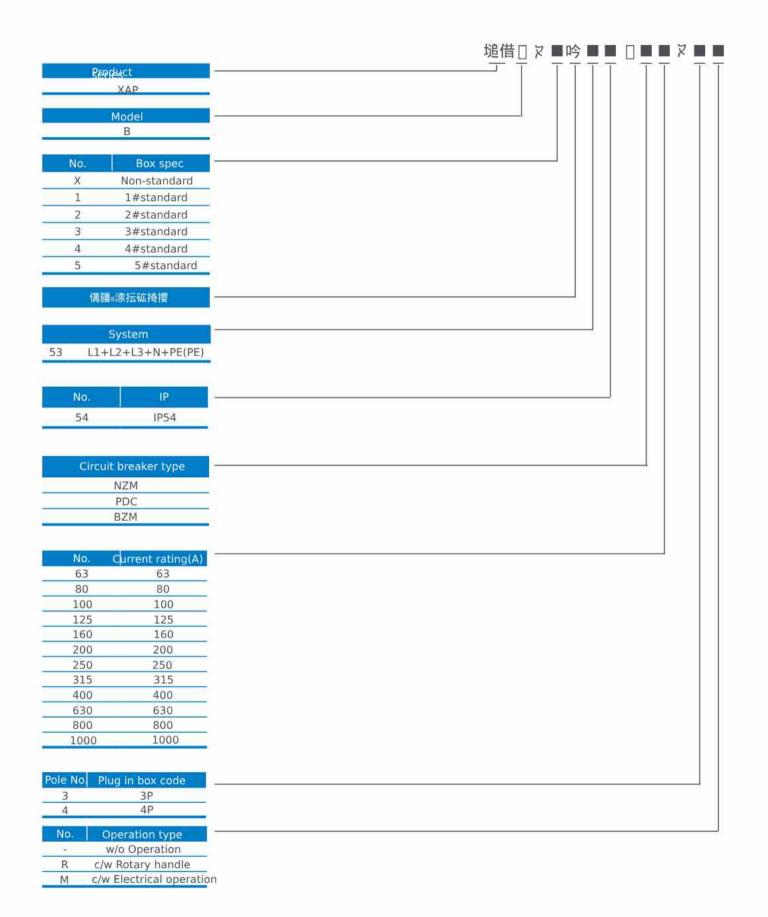


Current rating(A)	X[] mm[]	Y[] mm[]	A[ mm[	B[] mm[]	C[] mm[]	M□ mm□	Figure
400	450	273	25	50	50	Ф13 X 17	
500	450	278	25	50	50	Ø13 X 17	ū
630	450	288	25	50	50	Ф13 X 17	
800	450	303	25	50	50	Ф13 X 17	
1000	450	338	25	50	50	Ø13 X 17	П
1250	450	373	25	50	50	ФL3 X 17	D
1600	450	423	25	50	50	Ф13 X 17	П
2000	450	496	25	50	50	Ф13 X 17	П
2500	450	560	25	50	50	Ф13 X 17	D
3200	450	666	25	50	50	Ф13 X 17	D
4000	450	726	25	50	50	Ø13 X 17	6
5000	450	766	25	50	50	413 X 17	(2)

Note: All the data above indicates standard, for special design, contact our engineer.

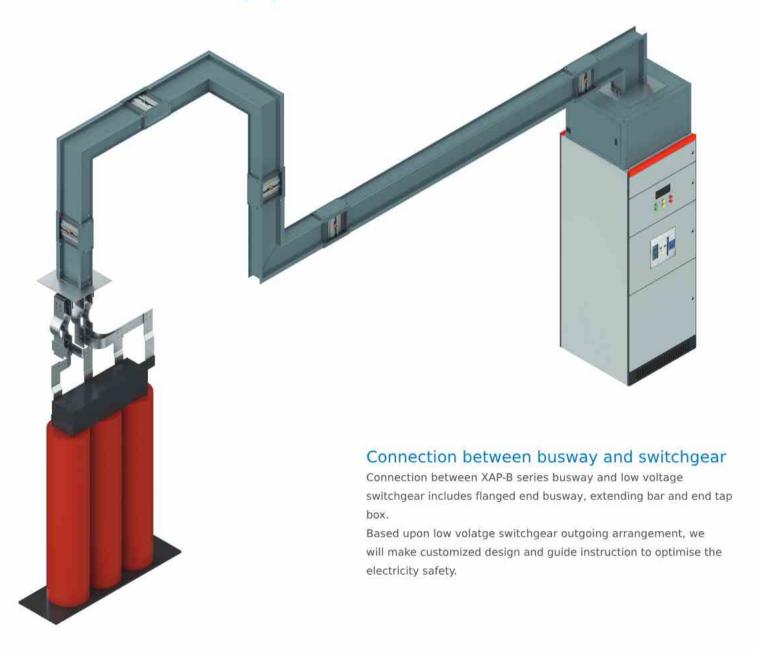
## XAP-B series compact busway Production selection





## XAP-B series Compact busway

### Connection with equipment



### Connection between busway and transformer

Connection between XAP-B series busway and transformer includes flanged end busway, extending bar ,flexible link and end tap box. Flexible link is used to absorb vibration during transformer operation. End tap box is used to protect the connection unit to secure the reliable safety.

### NOTE:

Eaton's mission is to improve the quality of life and the environment through the use of power management technologies and services. We provide sustainable solutions that help our customers effectively manage electrical, hydraulic, and mechanical power – more safely, more efficiently, and more reliably. Eaton's 2022 revenues were \$20.8 billion, and we have about 85000 employees worldwide and sell products to customers in more than 175 countries.

Eaton has been deeply involved in the Chinese market for more than 20 years, and has made rapid development since entering the Chinese market in 1993. In 2004, the company's Asia Pacific headquarters moved from Hong Kong to Shanghai. Greater China has about 8000 employees, 19 manufacturing bases and 5 R & D centers. Today, Eaton's the vast majority of products have been made in China.

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